FESSENDEN'S

SILK MANUAL

AND

PRACTICAL FARMER.

Devoted to the Culture of Silk, Agriculture, and Rural Economy.

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BOSTON, OCTOBER, 1836.

(For the Silk Manual.)

T. G. Fessenden, Esq. Editor of New-England Farmer and Silk Manual — I noticed an article in your last Manual stating the progress of one gentleman in Saco in the mulberry business in Maine. I was much pleased that he had entered into it so largely; his intelligence seems to be all that you have upon that interesting business. I will state to you the progress I have made and there are others in this vicinity making small beginnings. I have ten or twelve thousand plants, of four years growth. They are small of their age, as I thought not best to force the growth of them. I have one or two hundred that are six years old, but through inexperience in the cultivation and other casualities I get not much from them. One year ago last spring I transplanted from the seed beds twenty four hundred and thirty in a nursery form. They lived and have grown well this summer particularly. I have fed a few worms are made a little sewing silk by way of experiment for three years past. This season from my young trees principally, I have fed five-hundred worms, which far exceeded my most sanguine expectations; I had twenty pounds cocoons, chrysalis not killed, which produced one half pound raw silk spun on a common woollen wheel, having nothing better to work with, when doubled and twisted made three hundred and seventy five skeins of sewing silk of the same length and number of threads as imported silk. Now sir, I should like to be informed through the medium of your valuable paper, whether my success has been at a medium rate or not, as those of longer and more experience in the business.* I hatched the insects in my house and fed them there the three first weeks, when I transferred them to an out building which was only roughly boarded where they made their cocoons; I think I shall double my quantity of silk another season, as I planted three thousand in addition to my former number.

I have the ground prepared for three thousand more next spring; my opinion is now confirmed in the business and I shall extend my operations as fast as my small means will permit me to do. I do not intend to sell many of my young trees, for when sold they are gone from me and I am so much behind in the business. Enclosed you will find a sample of the silk we have made this year, manufactured by my wife and daughter without any knowledge except what they gained by reading and very attentive practice, mingled with a good share of patience. If you think the above imperfect sketches worth noticing it is at your disposal. Very respectfully yours, &c.

JAMES WALKER.

Note.

* Considering that the cocoons were not killed previous to weighing, and that the machinery for winding was simple and imperfect, the product as above stated was very satisfactory. In France, according to J. D'Homergue, it requires twelve pounds of cocoons to produce one pound of raw silk; eight pounds will in this country be amply sufficient to produce the same quantity. — *Fessenden's Silk Manual.*

Mr Walker deserves much commendation for his efforts in silk culture, and we are glad to perceive that he is determined to persevere, with such favorable prospects. — *Ed. Silk Manual.*

FACTS AND OBSERVATIONS.

The following is from an old number of the Memoirs of the Massachusetts Agr. Society.

The attention necessary to be paid to raising and feeding Silk worms, would form an agreeable and lucrative employment to those who are placed above manual services. There is no part of *America* wherein the silk worm cannot be supplied with proper feed: as mulberry trees will thrive with very little care, even in the coldest. We are informed that in 1789, no less than 5400 pounds of silk were raised in the cold and sandy territory of *Prussia.* Perhaps no country possesses greater advantages for this purpose, than *America;* and should this manufacture ever be actively pursued, it will not be extravagant to expect silken stuffs as cheap as any cloth made in America.

To shew with what ease and convenience the worm may be fed, the following directions are extracted from some sensible letters, written by Mr. Joseph Clarke, of Northampton, and communicated by the Hon. James Winthrop, Esq., of Cambridge. To these gentlemen, the Society return their thanks, and will be obliged by any further communications to improve the agriculture and manufactures of our country.

Extracts from Mr. Clarke's Letters.

About ten years ago, I set over an acre of land with small mulberry trees, ten feet apart; they flourished extremely well, and in three or four years, they formed a perfect forest. From these I used to gather my leaves; but I soon found the trouble and expense was too great; for I was obliged in the latter part of feeding, to employ a great many people, or the worm must starve; having observed those trees, which were accidentally broken down, sprouted anew and luxuriantly the following year, determined me on another method. I had a small enclosure of very rich ground, about six rods square, which in the spring of the year 1793, I ploughed and manured well. Here I sowed my mulberry seed in rows, like carrots or parsnips in a garden, at suitable distances from each other for weeding and hoeing between them. The seed came up well, and the plants were kept quite free from weeds that summer; in doing which, you must be very careful, as the plants are exceeding tender; in this first weeding the fingers must be principally used.—The next spring before they began to sprout, with a scythe, I cut down all the bushes within two inches of the ground, and carefully weed them. This method answered my most sanguine expectations; for by the middle of July, when the worms devour the most leaves, they had grown up three feet in height, and being cut with a sickle, furnished me with abundance of leaves, in a cheap, easy and expeditious manner. The same method has been pursued with these trees or bushes ever since; so that you see there is no necessity for sowing the seed annually. A field once sown, will, for aught I can see, last a thousand years, if it be well taken care of. My mulberry trees are more flourishing this year, and yielded more food for the worms than they ever did before. This I attribute chiefly to the manure I put on them the last spring; notwithstanding they were cut down last July, they are now (October) about three feet high. My worms were hatched out the 24th of June, and continued eating just four weeks. They have consumed upwards of three thousand pounds of leaves, and the trouble of gathering them has been but little, compared with the whole business. A man can reap 3 or 400 weight within an hour; the expense and trouble are therefore trifling. I perform about three quarters of the business myself. The quantity of silk produced is about ten pounds; as to the quality I can in no way so well inform you as by sending a skein of sewing silk,* which I pray you to accept.

The idea that water is injurious to silk worms, is totally unfounded. My worms this year have been chiefly fed on wet leaves, gathered early in the morning, and as they grow dry in the course of the day, were sprinkled with water.† I have used in one day three pails full, in sprinkling the leaves, for I think it invigorates the worm in sultry weather. Hot water for the purpose of killing the chrysalis that is within the cocoon to prevent his making his making his way through, and spoiling the silk is never used. Hot water is only used when the cocoons are wound off into skeins. To kill the chrysalis, the cocoons are put into an oven, about as warm as when a woman takes out her bread; or they are exposed one or two days to the fierce rays of the sun. The last method is best as there is no danger of injuring the silk, as may be the case in the former way. Should the oven be a little too warm, spread your cocoons on a table in the sun for two days successively; If you suspect they are not effectually killed let them be out another day. They must be carried in at night, they must not be wet; if you wish to know whether the chrysalis be dead, take one of the thickest of the cocoons and cut it open; if you cannot perceive any life, you may conclude they are sunned sufficiently; should you perceive any signs of life, sun them another day.

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* This Silk will bear a comparison with the best imported Silk.

† This candid statement destroys the idea of water being injurious to the silk worm, an opinion that has been long established and is still maintained in some late publications. To remove all doubt, (if any can possibly remain) the following mode is added, which will not only confirm Mr. Clarke's assertion, but teach

DIRECTION FOR SOWING THE SEED AND RAISING THE PLANTS OF THE WHITE ITALIAN MULBERRY TREE.

1. To sow an ounce of seed, prepare a bed 50 feet long and 4 feet broad. Manure it well with a compost composed of one third stable manure, one third ashes, and one third decomposed leaves from the woods, or garden mould; dig deep, pulverize finely, and then lay the beds off in drills 12 inches apart, one quarter or one half of an inch deep; sow the seed as thick as your onion or parsnips; cover with rich mould, press the mould down gently, but sufficiently to cause the seed to come into contact with the earth; and should the weather be dry, water the seed bed every other evening, it will assist in promoting the germination of the seed and vigorous growth of the plant.

2. Keep the beds clean of weeds; and give an occasional watering with suds and water, say once a week after they are up.

3. The second year, if not removed before, the plants must be removed into the nursery rows, which must be prepared as for any other crop. The ragged roots being taken off and the tap root shortened, the plants must be planted out 12 inches apart in rows three feet apart, the earth to be well trodden around the plant. As before, the earth must be kept open and free from weeds.

4. At two years old, the plants may be planted out into hedges, at 18 inches apart in rows six feet wide. The ground should be prepared as before directed, and some good rich mould put into the holes, to be pressed around the plant. If intended to be planted out as standard trees, 20 feet square apart would be a good distance; but in that case the plants should not be transplanted until they are about ten inches in diameter. In either case they will require trimming and topping, and if kept as hedges should be treated as other hedges are.— *Southern Agr.*

BERKS COUNTY SILK.—We have recently examined a specimen of *Sewing Silk*, the first ever manufactured in this county, and it was of such a quality, and the manner of its production so creditable, that it did our hearts good. It was the entire production of a young lady near Reading, one of Berks county's fairest daughters, who reared and fed the worms, spun the silk from the cocoons, and doubled and twisted it into skeins, all with her own hands. Here now is the example set to our young ladies, and we are persuaded they are about to imitate it, as a large quantity of mulberry seed has gone into different parts of the county from this place. How irresistible would be the charms of the young lady, when dressed in the fabric of her own hands' production, and how eagerly would the *beaux* press forward for her hand!—And well might they seek such wives, for they would be worth having.— *Reading Press.*

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us to prepare a stock of food for our worms, should any accident deprive them of the mulberry leaves, or should they be hatched before the trees have produced any.— Gather in the autumn, before the frosts commence, and in dry weather, the leaves of the mulberry tree, which must be dried in the sun, by spreading them on large cloths, reduce them to powder, and lay them up in a dry place; when it is necessary to feed with this powder, let it be moistened with water and spread round the worms, who will immediately feed upon it. Other food has been prepared to feed with, such as Lettuce, Endive, &c.; but we are assured by a person of great experience, that the silk produced by any other food than mulberry leaves is of an inferior quality, and the worms are sickly.

SEED CORN.

MR HOLMES:— Much is said and written of late on the choice of seed corn — some preferring eight, some ten, and some twelve rowed — some a large and some a small cob. When I select my seed corn I attend but little to the number of rows or the size of the cob, but to what the cob contains.

When we peel the trees of the forest where the bark is the principal object we choose the largest trees because the bark is the thickest, the trees longest, and still if small trees have as thick a bark as large ones it is very evident that we obtain more bark in proportion to the bulk of timber than we should from large trees. So with corn — the bark or coating being the sole object, it behoves us to obtain those ears that are best coated. When I select my seed corn whether taken from the field or the heap, I take the largest, ripest and best filled to appearance — but when I come to shelling, which I always do by hand, it is subject to a more minute selection. When I have shelled about one fourth part from the top end of the ear, which part I always exclude from my seed, I can judge whether it is well coated or not, or whether the kernels are deep and of good length and well set, and if I find the coating thin or shallow, I at once exclude it without any regard to the number of rows or size of the cob.

The Boston Post has discovered an infallible remedy to disperse a mob. It consists merely in carrying round a contribution box.

The New York Gazette relates as a fact within its own knowledge, that a gentleman at a reading room, after employing four hours in wading thro' the contents of his favorite newspaper, laid it down and taking up another paper pored it over for two hours longer, before he discovered that it was a duplicate copy of the first, which a wag had put on the table to try him.

FARMERS' WORK.

A VALUABLE BOOK ON CATTLE.— We have been presented by the publishers, Grigg and Elliot, of Philadelphia, by the hands of Gould, Kendall and Lincoln, Booksellers, Boston, with a very useful and excellent work, entitled "Cattle; their Breeds, Management, and Diseases; with an Index. Published under the superintendence of the Society for the Diffusion of Useful Knowledge."

Of the utility of a good work of this kind there can be but one opinion among intelligent and reflecting persons. "No man will deny the importance of the animal whose milk affords butter, cheese and various combinations for his table — whose hide gives leather for machinery, harness, shoes, &c.— whose hair supports the plaster upon his walls — whose horn and bone are converted into medicines, and articles constantly in his use — whose tallow and fat are consumed in candles and in soap, necessary to his comfort and health — whose heels afford oil, valuable in many of his pursuits — whose stomach even constitutes an agreeable repast — whose tail is converted into a couch for his indulgence or repose — and whose patient offspring, after having enabled him to reap the harvest of his fields, yields the most wholesome and nutritious food for his frame, and finally, by his offal, enriches the soil."

From a cursory perusal of this volume, (we have not yet had time to give that attention which it deserves) we have formed a high opinion of its merits. It gives us the natural history of the ox, the different breeds of British cattle, such as "Polled Cattle, Irish Cattle, Long Horn, Short Horn, Foreign cattle, including the Alderny, Najore cattle, Buffalo and Indian cattle, structure and diseases of different parts of the ox; Breeding, Parturition, the diseases and management of calves," &c. and "a list of the medicines used in the treatment of the diseases of cattle." A few extracts from this very valuable book will give our readers some means of forming a correct estimate of the whole treatise.

In the introduction it is remarked, "If an ox is not individually so valuable as a horse, yet, in the aggregate, cattle constitute a much greater proportion of the wealth of the country; for although Great Britain contains a million and a half of horses, she has to boast of more than eight millions of cattle unrivalled in the world."

The author gives the items of a calculation, by which he computes that the actual value of cattle, sheep and swine in Great Britain is nearly one hundred and twenty millions sterling, and continues, "Although much has been done by agricultural societies to improve the breed and the general treatment of these animals, and much valuable instruction is to be found scattered in many a volume, no one has yet attempted to collect these fragments of "useful knowledge," and to add to them his own experience; and in one very important part of our subject there has been the most unaccountable neglect, for there is scarcely in the English language a work on the preservation of the health, and the prevention and cure of the diseases of cattle and sheep on which any dependence can be placed. Although a tenth part of the sheep and lambs die annually of disease, (more than four millions perished of the rot alone, in the winter of 1829-30,) and at least a fifteenth part of the neat cattle are destroyed by inflammatory fever and milk fever, red water, hoose, and diarhœa; and the country incurs a loss of nearly ten millions of pounds annually, the agriculturist knows not where to go for information on the nature and the cure of the maladies of which they die, and is either driven to confide in the boasted skill of the pretender or make up his mind that it is in vain to struggle against the evils which he cannot arrest, and lets matters take their course."

"The parent race of the ox is said to have been much larger than any of the present varieties. The Urus in his wild state at least, was an enormous and fierce animal, and ancient legends have thrown around him an air of mystery. In almost every part of the continent, and in every district of England, skulls, evidently belonging to cattle have been found, far exceeding in bulk any now known. There is a fine specimen in the British Museum: the peculiarity of the horns will be observed, resembling smaller ones, dug up in the mines of Cornwall, preserved in the wild cattle of Chillingham Park, and not quite lost in our native breeds of Devon and East Sussex, and those of the Welsh mountains, and the Highlands. The cumbat of Guy, Earl of Warwick, with the dun cow, the skull of which is yet preserved in the castle of Warwick will sufficiently prove the comparatively large size of some of the wild cattle of that day. We have reason to believe, however, that this referred more to individuals than to the character of the breed generally, for there is no doubt that, within the last century, the size of the cattle has progressively increased in England, and kept pace with the improvement in agriculture."

This work will be found amusing as well as useful, and in our opinion ought to be found in every Farmer's Library.

GRAPES.— We hope that amidst all the new things that are brought before the public, which have in their success a tendency to contribute to our prosperity and advance our comforts, some, which may now be considered as old, will not be entirely forgotten. While many are engaging with such flattering prospects of reward in the culture of the mulberry, the manufacture of silk, and the making of sugar from beets, we hope that grapes for wine and the table will not be entirely overlooked. For a year or two the columns of the Farmer bore evidence of the interest the raising of the grape excited: but for some cause which remains to be explained, little or nothing is now heard on the subject.

EARLY SNOW.— Snow fell to the depth of one or two inches on Wednesday, last week, in Ashburnham, N.H. and its vicinity; and in Ashby, Mass.

BRIEF HINTS FOR AUTUMN WORK.

Select seed wheat from that which grew in the most productive parts of the field—endeavor to obtain the largest seed, and sow none other—this, if practised in yearly succession, will greatly improve the variety.

Sow none but clean seed—for farmers may as well raise wheat as to raise weeds.

Chess may be separated from seed wheat by a good fanning mill. It may also by using brine—if the brine is too strong, so that good plump wheat will not sink in it, dilute it with water until it will; and the chess and light imperfect grains will float, and may be skimmed off. Then empty the wheat into a basket set on a tub or barrel, and the brine will run through into it for further use. Both these methods of cleansing wheat may be combined to advantage.

Picking the largest heads by hand is a slow but very thorough way, and more particularly beneficial where crops are sown expressly for seed.

Smut in wheat crops is perpetuated by the dust of the smut adhering to the seed. It may be prevented by steeping the seed twenty-four hours in ley, or a mixture of fresh lime and water made of half a pound of the former to one gallon of the latter. This is certain prevention. Care should be taken that seed is not rendered foul by putting it in smutty bags, or those where smutty wheat has been kept.

The quantity of wheat sown to the acre should be from five pecks to two bushels, varying with the time of sowing, and with the size of the grains of seed. Early sown wheat should be in less quantity than late: and wheat with small grains should be in less quantity than large, because there are more of them to a bushel.

Furrow drains should be cut by passing the plough three or four times through the same furrow, and they should be made through all low parts of the field. They should be well cleared of loose earth by means of a shovel or hoe, so as to admit the surface water in wet seasons to pass freely off.

Corn, should always be *cut up*, that is, cut off near the surface of the ground, and not *topped*, or cut off above the ears. The former is more expeditious, it saves twice as much fodder, and is attended with a better crop of corn, as it is always diminished considerably by topping. This has been proved by repeated experiments, where the crop was measured.

Seed corn should be always selected in autumn—take such for this purpose as have the greatest number of ears to the stalk.

Hogs to be fattened may be turned into apple orchards to pick up falling apples. They will fatten on them as well as on corn if they have a plenty of them.

Grian fed tohogs should always if possible, be first ground to meal.

Considerable advantage is derived from feeding *cooked* food, (steamed or boiled) to hogs, and it should always be practised when the number is sufficient to warrant the erection of proper apparatus for it.

Cooked food for fattening cattle is of little advantage, and not worth the trouble.

Advantage is generally derived from using *mixed* food for domestic animals.

Straw may always be of great use to the farmer in many ways, and is well worth preserving. The following method of securing it is given by a correspondent of the Genesee Farmer in a former volume: "Previous to thrashing, I go to a hay stack and twist a quantity of bands from six to ten feet long, which are placed at the barn door, and when the straw is raked to the doors two men take a band and stretch it over the bundle of straw, then run each a hand under it, and turn it over endwise, when one of them fastens the band, and the other prepares another band. In that manner two men will bind as fast as the swiftest machine can thrash, and the straw is stacked as securely as wheat, and in a fourth of the time required when not bound." When wanted it may be afterwards removed with far less labor than when stacked without binding.

Strawberries may be transplanted with advantage, in the early part of autumn.

Fruit Trees may be removed and transplanted after the first of October. Most farmers who transplant fruit trees, suffer a great loss by not doing the work *well*. The principal care needed is, first, to dig the holes large, say six feet across, and fifteen or eighteen inches deep; secondly, to preserve carefully, the roots as entire and uninjured as possible, and not to suffer them to become dry out of the ground; and thirdly, to fill the hole with finely pulverised, rich earth, (not manure) shaking it in small quantities, and packing it closely but gently about the roots, so as to leave them in their natural position in the soil.—The whole expense of this would not be more than half the price of the tree, and in five years it would be three times the size which it would be if transplanted by the common way of digging small holes and doing the work hastily and imperfectly.—*Gen. Farmer.*

CUTTING UP CORN BY THE ROOTS.

BY J. S. P.

There has been much said this season about the corn crop, and it must be confessed that, owing to the coldness of the season, the corn harvest

promises little to glad the heart of the husbandman. Much complaint has been heard in relation to the seed not germinating, and many impute it to the practice of cutting up corn by the roots; but this I know to be a mistake, having followed that practice for the last 18 years, yet never failed of having good seed in consequence of it.

It is true, that if corn is cut up and crowded into large bunches or stacks when damp, its germinating powers will be destroyed by the heat generated thereby, but if put up in small stacks, free from water, and well secured, the corn when husked, will be found of the first quality. If corn thus saved is to be removed to the barn for husking, care should be taken not to crowd too much together, as it will heat in three or four days sufficiently to make it sprout, thus spoiling it for seed, as well as rendering it less valuable for domestic purposes. When corn thus cut up is husked in the field, the best ears should be selected for seed, being careful to leave sufficient husks on them for braiding them into bunches, to be hung up in a dry and secure place till needed for use.

Of the various modes of harvesting corn, I consider that of cutting it up by the roots as the preferable one, and especially if nipped by a premature frost, since more sound corn will thereby be produced, while the stalks, if well cured, will make most excellent fodder, which of itself is sufficient to pay for cutting and harvesting the corn. I have known many farmers, after their stalks had been cured, husk their corn in the field, and through carelessness suffer the fodder to remain in the field exposed to autumnal rains till spoiled. This to say the least of it, is a neeedless waste, and an evidence of a slovenly farmer.

Sheffield, Aug. 13, 1836.

Note by J. S. P.—I once had a field of corn struck by a severe frost in the latter end of August, the corn then being completely filled, though the glazing process had but partially commenced round the root of the ears. We supposed the crop spoiled, but at the suggestion of a friend, took scythes just at the opening of day, and before the sun had risen sufficiently high to dispel the frost, most of the corn was prostrate. The consequence was, that the warmth exhaling from the earth dis pelled the frost, and no appearance of it was perceptible after the sun had exerted its influence on the stalks as they lay prostrate. In the afternoon the corn was gathered into small stacks, secured and left to ripen. When the period for husking arrived, my corn came forth bright and sound, superior in fact to any I had before raised.—*Gen. Farmer.*

Cold Weather and Mulberries.—Fears have by some been entertained, that the frosts which occurred the last week would be injurious to the mulberry. But in this case as in others, where injury is apprehended, we have reason for thankfulness, that we have been visited by slight frosts, which, although destructive to some vegetables, have greatly benefitted the Chinese Mulberry, by checking its too rapid growth,—in consequence of which, we may hope for a better ripening of the wood, and preparing the tree and its branches for better and more perfect cuttings —*Silk Cabinet.*

(From the Baltimore Farmer.)

The article on the recent introduction of the *Waterloo Cæsarean Evergreen Cabbage*, into England, as food for cattle, which will be found in this day's paper, we copy from the September number of the Horticultural Register and Gardener's Magazine, an excellent work published in Boston.

We have a few hundred of these plants growing at our little establishment, but as the season has been inauspicious, and they have not had a fair chance for luxuriant growth, we cannot say what may be the result of our experiment. We obtained the seed of Robt. Sinclair, Jr. at $5 a pound, those in England are, or were held at $5 for 20 seeds. The next season we shall take time by the forelock, and give the article a more fair and perfect trial. If it should prove by proper test to realize a moiety of what has been said of it, it will certainly produce a new era in agricultural pursuits; but as the venders of the seed of new things, are not always the most scrupulous in pronouncing their eulogies on their virtues, time and actual cultivation are necessary in order that their capacities may be properly demonstrated.

In the more southern portions of our country, if this cabbage should prove as valuable as some of its economists have stated it to be, it will, indeed, be a blessing. But of its properties after we have had time to form a correct practical opinion, we shall speak more fully.

Note by the editor of the Baltimore Farmer.—We procured Northern corn for our planting. The first patch, about two acres, we planted on the 14th May; it came up just before the cold and long continued rain which commenced on the 24th of that month, and did not terminate for several weeks; it has been subsequently subjected to alternations of scorching droughts and rains, and preserved, through all the disadvantages of the season, a healthful appearance. On the 20th of August, eight cattle broke in upon it and consumed and broke off a large number of the ears.—Those which were broken off on examination we found to be perfectly matured.

Corn.—The cold weather of the past summer and spring, it is known, prevented the growth of the Indian Corn, so much as to interfere greatly with the harvest of that important grain. Aware of the effects of short seasons on summer grains, Mr E. J. Pierce, who has a delightful farm near Germantown, procured a quantity of seed corn from the northern part of New Hampshire, where the summers are about the shortest of any part of our country. This corn was planted on the first day of June, and on the first day of September, that is, on Thursday last, it was harvested. We have now before us two ears from Mr P.'s field; they are full of large grains; and we understand that the eight acres planted by Mr P. with this seed will produce nearly 400 bushels. Does it not concern our farmers, generally, to provide themselves with a quantity of such seed, in order that they may be prepared against the effects of such a summer as the past upon their corn-fields? —*U. S. Gaz.*

Price of Bread Stuffs.—We would not needlessly interrupt the enjoyment of those who look forward to the next winter as a time of general starvation. But lest their dreams should be too suddenly broken, we must call their attention to the facts contained in the last news from Europe respecting the prices of breadstuffs there.—We happen to know of an operation at Liverpool by which fifty thousand bushels of wheat are to be immediately forwarded to this country, and by the prices which are published, there is little doubt that much larger supplies will be soon forthcoming; for the long continuance of high prices, the successful issue of the recent importations, and the fact, well ascertained that our domestic supplies are inadequate to our wants, will give new confidence in future operations. Let us see at what prices we can be supplied.

In Paris the price of bread is about 2 cents, and in London 3 cents per lb. We found a shilling loaf in New York yesterday to weigh 2 lbs. 3 oz., which is near 6 cents per lb. The price of wheat in Paris is 112 cents a bushel, and the price of flour $5 a barrel. In London flour is $8 a barrel. In the ports of the Mediterranean and of the Baltic, bread stuffs are much cheaper than in either London or Paris. The price of good wheat at Naples is 2s 10d sterling a bushel, or 67 cents. From any one of these places freight might be obtained at 38 cents per barrel on flour, and 12 1-2 cents per bushel on wheat, or about half the rate charged on transportation of the same articles from Rochester, and one fourth of what is charged from Ohio. Fifty thousand bushels of corn have lately been received here from Ohio by one house, at a freight of 49 cents. The duty on flour is one dollar a barrel, and on wheat 25 cents a bushel. Wheat, therefore, can be imported from Naples and laid down in New York at 125 to 135 cents a bushel, all charges paid, and from a hundred other places at the same or a less price. Corn and rye are not burdened with a duty, and may be imported to great advantage. The countries of Europe and Asia afford stores of bread stuffs almost inexhaustible, so that the supplies for this country, if they should run to the highest possible quantity, could only affect prices in a very slight degree. Free trade will supply all our wants, and the cost, with a liberal mercantile profit, will not carry prices above 150 cents for wheat, 100 cents for rye and Indian corn, 50 cents for oats per bushel, and $7 50 for flour per barrel. So let the desponding cheer up for no one who is industrious and frugal need starve in 1836 or 1837.—*Journal of Commerce.*

Useful Invention.—The London Literary Gazette publishes an account of a pressing machine for Peat, which must be of vast utility to Ireland and part of Scotland where this article is had in great abundance. It states that the machine was invented by Lord Willoughby de Eresby, and it compresses the Peat into a mass which renders it equal to all the purposes for which Coal is used. For a long time attempts have been made to effect this desired object, and Lord Willoughby has, at last, overcome every obstacle, and by a very simple machine can convert the Peat rapidly into a combustible fit for all the uses of Coal, and, in some cases, being devoid of sulphur, superior to that valuable substance. The Peat is cut and pressed into a chamber, upon which a powerful weight is made to descend. The moisture, squeezed out, runs through vertical grooves, and is carried off, whilst every time the incumbent weight descends, knives pass through these grooves and keep them clean for the next operation. At the bottom of the chamber a slide is withdrawn, and the solid peat is precipitated to any convenient receptacle. Being dried for a very short period, it welds iron, and is fit for all that coal furnaces can do. Penknives have been manufactured in this way, and the success of the experiment demonstrated to be complete. Great national results are anticipated from the improvement: the prosperity of Ireland and the amelioration of the north of Scotland are its ready and obvious consequences.

The field of Waterloo is now converted into a large manufactory of sugar from the beet root, several Belgian capitalists having established works on the spot. The soil in that neighborhood is said to be excellent. It has been well manured with human gore, and must produce no other than the *blood beet.*

A FLOATING FARM YARD.—The following sketch of a family floating down the Ohio, on a raft, is at once highly graphic and characteristic of our inland emigration:

"To-day we have passed two large rafts, lashed together, by which simple conveyance several families from New England were transporting themselves and their property to the land of promise in the western woods. Each raft was 80 or 90 feet long, with a small house erected on it, and on each was a stack of hay, round which several horses and cows were feeding, while the paraphernalia of a farm yard, the ploughs, wagons, pigs, children and poultry, carelessly distributed, gave to the whole more the appearance of a permanent residence, than of a caravan of adventures seeking a home. A respectable looking old lady, with spectacles on her nose, was seated on a chair at the door of one of the cabins, employed in knitting; another female was at the washtub, the men were chewing their tobacco with as much complacency as if they had been in the land of steady habits; and the various avocations seemed to go on with the steadiness of clock work. In this manner our western emigrants travel at slight expense. They carry with them their own provisions; their raft floats with the current; and honest Jonathan, surrounded with his scolding, squalling, grunting, lowing and neighing dependants, floats to the point proposed, without leaving his own fireside; and on his arrival there, may go on shore with his household and commence business with as little ceremony as a grave personage, who on his marriage with a rich widow, said that he had "nothing to do but walk in and hang up his hat."

(From the Genesee Farmer.)

RULES TO BE OBSERVED IN THE MANAGEMENT OF LIVE STOCK—THE MANNER OF NURSING CALVES.

To my Son.—Although it is believed the suggestions contained in my letter are worthy of your attention, consideration and practical regard, yet I have little expectation that they will be responded to either by yourself or your fellow-citizens, in the manner which would be most pleasing to me. It is hard to persuade farmers to alter the course of their proceedings. The American farmers have it in their power to improve their course of husbandry surprisingly, by introducing the best breeds of European stock, I have not the least doubt. Could you obtain for use in your neighborhood a fine bullock of the improved Durham Short Horned breed, although it were but half blooded, it would be a valuable acquisition to the husbandry of that place.

It appears to me the peculiar fitness of your soil for the husbandry of live stock, furnishes a reason wherefore you and your fellow citizens should set your aims high in regard to that object. But I will dismiss this subject. It is possible that I have urged the introduction of foreign breeds beyond what its importance requires.

If you cannot obtain the improved breeds of other countries, or if that should not be thought advisable, then make the best use you can of our own native breeds. There are among the breeds of our own country very many fine animals, and these breeds are susceptible of improvement, perhaps to an indefinite extent. It is believed the principal dairies in the country have hitherto been composed chiefly, if not altogether, of native stock. By taking suitable care at first to make judicious selections of animals, and afterwards to perpetuate and improve their good properties, husbandmen may, in a short time, avail themselves of such home-bred animals as will be highly respectable and profitable. In relation to such cases, the suggestions contained in my last letter, relative to employing only the best animals for propagation, will be highly important. It will be important too to exercise much sound judgment and discretion in selecting calves that are intended to be kept and raised. None but the best, or at least none but such as appear to be well bred, healthy, and of good form, should be selected for that use. All such as are under size, feeble, ill shapen, or in any respect unpromising, should be turned over to the butcher, or otherwise disposed of.

There are, in connexion with the husbandry of live stock, other precautionary prudences which are very necessary, but are not in general regarded according to their importance. One is, not to undertake to keep too much stock. This is a very common error, and it is one from which serious injuries frequently result. It should be considered that the value of live stock depends much less on its numerical amount, than on the quality of the animals which compose it. Animals, in order to be rendered profitable, must be well fed. The only proper and profitable method of keeping any sort of live stock, is to keep every animal, from the time of its birth onwards, and at all seasons of the year, in perfectly good order, and in a thriving condition. Care then should be taken not to keep more stock than can be kekt in this manner.

In order to guard against the evils resulting from having more stock than the means of keeping are sufficient to sustain, much good judgment and prudent forecast should be exercised in apportioning the amount of stock to the means provided for keeping animals. In the spring, the husbandman who keeps stock should consider and inquire how many acres of grazing ground he

has at his disposal, and what number of such animals as he intends to keep that will be likely to supply with pasture. In the fall he should make similar inquiries relaiive to the quantity of hay, and other fodder which he has provided for wintering his stock. How many tons of hay has he in store. If roots, straw, stalks, and other articles of coarse fodder are to be used, then let him inquire how great is the quantity of hay may they be supposed to be equivalent. These should be the first inquiries, and then another should follow: What amount of stock is it likely these provisions will be sufficient to keep through the winter? When these questions are settled, the rule always should be, to keep a smaller number of animals than it is supposed the means of keeping might, under favorable circumstances, be sufficient to sustain. The remark which I am now about to make is, in my view, of more than ordinary importance, and I desire you to regard it accordingly. The remark is that from being under-stocked, injuries rarely result; and if they do, they are generally small and trifling; but to be overstocked is always disastrous. It is far better to be able to sell half a dozen tons of hay in the spring than to starve your stock through the winter, and after all, be obliged to buy even the smallest quantity. It should be considered too, that close grazing in the summer injures pasture, and scanty feeding, either in summer or winter, ruins the stock.

In order to be able to make judicious apportionments, according to the preceding suggestions, it is very necessary to know, as nearly as practicable, how much pasture, and what quantity of hay and other keeping, will be required to keep any given amount of stock through a year. Should it be inquired how much pasture, and what quantity of hay are usually required to keep a horse, or an ox, or a cow, through a year, it is believed very few farmers would be able to answer the question. It would be well for farmers to ascertain themselves, much more than they do, to make accurate observations, in regard to these and many other things. I do not claim to be master of the subject to which I am now calling your attention, nor can I suppose that the idea of infallibility should be attached to the estimates which I am about to submit. From the best lights that have been spread before me, I am led to conclude, that when hay alone is depended on, it usually requires two tons of hay to winter a horse—for one ox about as much—for a cow one and a half ton —for twelve sheep the same as for a cow. It is believed, that for summering either a horse or an ox, at least three acres of good pasture, or an equivalent thereto, will be required. For summering a cow, two and a half acres may suffice—the same for summering twelve sheep.

To the cattle breeder, few things are more important than to know the best manner of nursing and rearing calves. I have taken some pains to avail myself of lights on this subject, in which I have not been altogether unsuccessful, nor yet successful to the extent of my desires and expectaions. It is generally conceded, that the ancients practice of letting calves suck is not the best, and so far as I know, the practice is generally discontinued. For several reasons which cannot be explained in this letter, it is supposed to be better to take them off at a very early age, and having learned them to drink milk, feed them with that article till they are old enough to be weaned.—Yet if new milk is the article of food chiefly depended on, the expense of nursing calves in this way is scarcely less than when they are allowed to suck, and it amounts to a considerable item.—For this reason it has long since been considered as a desideratum to devise some less expensive and equally successful way of nursing calves. I am glad to say, there is good reason to believe this has been done.

Several correspondents of the Genesee Farmer have published in that journal the details of their successful practice in nursing calves on skimmed milk, and without the use of any other. Whey has been used for the same purpose, and it is said with perfectly good success. When either skimmed milk or whey is to be used as an article of food for calves, the practice is, in the first place, to warm it to about the temperature of new milk. Boiling it, and afterwards letting it cool down to that temperature, it is said to be better. This being done, the next process is to mix it with a small quantity of meal. It may be Indian meal, or it may be fine bran, or meal made of oats or barley. As preventives of disease, and preservatives of good health in the young animals, it is recommended to make frequently small additions to their food of such articles as are known to be useful for such purposes. Particularly, flax seed is recommended for that use. This, it is said, should be boiled or soaked to fit it for use, and then it may be given frequently at the rate of two or three spoonsfull for a calf. It is recommended also, to place before calves lumps of chalk, which it is said they will lick, to the great advantage of their health. Or the chalk may be pulverized, and small quantities given them in their food. It scarcely need be added here, that calves, as well as other animals, require salt, and should have it in suitable portions. In all cases, when calves have attained to any considerable age, they should have hay or grass within their reach, of which they may eat enough to form what is called the cud. It is believed that with proper attention to these requisites, and others which experience and sound judgment will suggest, there will be found

no difficulty in keeping calves well on skimmed milk or whey. Care, however, should be taken in every stage of feeding, not to feed calves to the full extent of their appetites. This is deemed quite important.

It is admitted, that calves kept upon skimmed milk and whey are more liable to disease than when they are allowed to suck, or are fed upon new milk. It is said, the principal and most dangerous disease to which they are exposed, is that of looseness or scouring. For this there is a very simple remedy, which is said to be prompt and effectual, is prescribed. It is only to pour into the food prepared for the sick calf, two or three spoonsfull of rennet, such as is used in cheese-making. If calves are costive, the remedy recommended is, to give them pot liquor, in which pork, mutton, or bacon has been boiled.

New-York State, 1836. A Father.

Cold Weather.—On the 5th, 6th and 7th of September were smart frosts, and fires in our dwellings were very comfortable. A gentleman from Europe says the summer has been remarkable for cold weather. Another gentleman from China says that snow fell last winter in Canton two inches deep, to the amazement of the Chinese, having never before been known or seen in Canton — they thought that the spheres were wheeling about.

Intelligence from the westward confirms the reports of an unfavorable season and of short crops. Even in our own fertile valley the crops look sorry. However unfavorable appearances may be respecting the crops, circumstances may yet falsify all these predictions, and give the farmer a plentiful harvest.

A PREVENTIVE OF THE WHEAT FLY.

The following communication we copy from the Baltimore *American*, and commend it to our readers as being worthy of their attention. We published under our head of "Work for September," in our 18th number last year, the same recipe, with the exception that we recommended the seed to be passed through strong ley, or lime water, instead of pickle.— *Balt. Far.*

Messrs Editors — Some time since in a communication published in the Baltimore papers, I stated my views on the destruction of wheat by the Hessian fly, and offered a remedy against its ravages. As this season will be remarkable for the devastation committed by this insect, and as the time is approaching for seeding for the next crop, I request a small space in your columns to bring before our farmers again the remedy then proposed, fully believing that if followed much good will be the result from it.

On observation it has been found that the insect producing the fly progresses with the growth of the wheat; and if the wheat is early sown, and the season is favorable to a luxuriant vegetation, the fly will be very perceptible in the autumn.— The progress of the insect, as is observed in a former communication, is from the seed upwards, on one stem between the root and surface of the earth. The question then arises, how is this insect generated, and what means should be used to destroy it? It is either generated in the grain of wheat similar to the bug which infests the pea, or the insect when in its winged state deposites an egg on the surface of the grain when in the ear and thus when the wheat is sown and begins to vegetate, the egg vivifies and the destructive worm is formed.

For the following reasons I am strongly inclined to the latter opinion. It is known that this insect releases itself by bursting the blade that covers it, when the head is forming, and assumes its winged state, and there is to my mind no doubt that this fly deposits its egg on the wheat when filling and coming to perfection. If I had any doubts on this subject they would be removed by the fact that with the aid of the microscope the egg is discernible in the form of a glutinous matter. If this opinion be correct, the remedy is simple, and worthy at least of a fair trial. Providence inflicts no evil upon mankind without also providing some remedy, and unless this is intended as a special curse upon the husbandman, there is and must be a remedy which he must find out by actual experiment.

In the course of twenty years experience in this matter, I have known but one experiment made to destroy this fly, and that proved successful. An intelligent farmer in Loudon county, Va. having understood that some of his neighbors with the aid of a microscope, had discovered a glutinous matter on the surface of wheat which they believed to be the egg of the fly, determined to try an experiment for its destruction and succeeded in that crop; but unfortunately it was not followed up, and whether it will be an effectual remedy in all seasons, remains yet to be tested. This plan which he followed, and which it is the object of this communication to recommend to the notice of the farmers, is simply to pass the seed wheat through a strong brine or pickle, washing it well, and then rolling it in slackened lime, (similar to rolling it in Plaster of Paris) not preparing at one time more than a day's sowing. Washing the wheat in brine, and rolling it in the lime are done primarily for the purpose of destroying the egg, but it answers another good purpose — that of preventing the growth of smut. The lime will also be found to act as a powerful stimulant to the growth of the wheat, and superior to that of plaster.

This remedy being so simple, and as I firmly believe so efficacious, I hope there will be many farmers disposed to make trial of it, and thereby fully test its correctness. If I should be instrumental in arresting the progress of this direful enemy of the farmer, I shall be amply compensated in the recollection that I have discharged my duty to the community.

AN AGRICULTURIST OF MARYLAND.

(From the Genesee Farmer.)

RAISING AND FLOURING WHEAT.

MR HOLMES:— I find your correspondents are reviewing the wheat raising topic, and I am pleased to find them awake to the subject.

I should be glad if I could make any observations which would be beneficial to the public as it respects the culture of this grain, possibly I can. In regard to grinding or flouring I have no doubt my remarks, though perhaps not new to all, will be useful to every one, who will adopt the practice which I shall recommend. First as to the raising. In regard to clover or sward land for a crop, I find that it ought to have some manure turned in as well as a small top dressing to ensure a good crop, such as ashes or plaster. The slow growth of wheat on such land owing to the gradual rotting of the sod, prevents much danger from blight or blast. The same may be said of the crop after peas. Pasture land will produce an excellent crop, if turned over with a top dressing of ashes, say five or six bushels to the acre, even if no manure is turned in, and perhaps may be the most sure method of raising wheat in this part of the country. I find by my own experience, strengthened by the observations of Dr. Bates, that on all sandy soils with gravel as a subsoil, or clay if it is five deep; steeped or leached ashes and clay as a manure, will ensure the crop of wheat.

Second, as to the flouring or grinding of wheat. When we have raised the wheat, we ought to be able to make the best of the article it is capable of, and I hope your readers will pardon me if I relate a few facts and give some reasons why this business should be better attended to, if we wish to compete with other wheat growing countries. It seems to be necessary to keep the mill-stones apart by the hardest corn, in order to get either fine flour or the greatest quantity. I once carried to the mill in Winthrop, one and a half bushels, and paid the miller, Mr Stanley, for grinding it, instead of giving him the toll as usual.

After the wheat had passed through the cleanser, I scattered in three quarts of corn as evenly as I could, and weighed the flour it made. It was allowed by all to be finer and lighter than that made from the same wheat without the corn.

It yielded 40 1-3 lbs., to the bushel.— Four bushels would have made 196 lbs. of flour and a fraction over, which would of course make a fraction over a barrel.

Mr Sanborn of Wales stood by. He had brought some very good wheat to mill, and he put in two quarts of corn to the bushel which he raised year before last. He afterwards told me that he obtained 54 lbs. to the bushel.

Try it brother Farmers, and my word for it, you will never grind, or rather *flat* out wheat, as you have done, and give the residue to the hogs, calling it wheat bran, when there is at least ten pounds of flour in it. I am told that at the South, it is always done, and may we not expect that one fourth at least of corn is put in, and then is really better than when none at all is put in.

I had in my bushel and a half, nine pounds and three fourths of coarse or second sort, so that in fact I had more than fifty pounds of eatable flour. My wheat was very dry, if it had for a short time been placed over some steam, so as to moisten it a little, the hull would have been less cut by the mill, and the flour would have been better.

This I am told is sometimes practised at some flour mills. Will any farmer longer neglect to raise wheat and grind it in the best manner, and pay away all his money for flour and be in consequence as poor as a church mouse? Or will you take care of yourselves? It remains with you to say. Without economy no one can expect to have much, but with it, and a little industry, everything.

If you neglect to raise your bread, or if you do raise a little, and give one fifth to the hogs under the name of wheat bran, at the same time extol Southern flour and prefer it to your own, merely because it is ground better and finer, you must expect yourselves and the State to lag behind the others in wealth and improvements. Our mills I believe are good, and I have ever found the millers accommodating. Look to yourselves, brother Farmers.

ELIJAH WOOD.

SUGAR FROM INDIAN CORN.— M. Pallis lately presented to the Academie des Sciences of Paris, a sample of this substance, extracted from the stem of the plant, which has been found to contain nearly six per cent. of syrup boiled to forty degrees, a part of which will not crystalize before fructification; but it condenses and acquires more consistency from that period to the state of complete maturity. The most favorable time to obtain the greatest quantity of sugar is immediately after the maturity and gathering of the fruit. The matter left after the extraction of sugar is capital to feed cattle or to make packing paper.

Morus Multicaulis.— We yesterday received from the nursery of A. Brownell, Esq. of Westport, a Mulberry leaf of this species, the stalk of which was engrafted into the common white Mulberry last spring. Within the six months past it has grown upwards of six feet in height, and the leaf before us is twelve inches in length and eleven inches in width. We understand that Mr Brownell has about fifty thousand of the White Mulberry tree now in his nursery.— *New Bedford Gaz.*

Hard Times.— High rents and prices for everything we eat and wear, are themes of universal complaint. Bacon, beef, veal, lamb, poultry, eggs, butter, and all the little etceteras of the table, are double former prices.— Under such circumstances economy should be the word with all those who have to gain their livelihood. Cut down every useless expense and useless indulgence; get up an hour sooner in the morning, and go to bed an hour later at night; work in a little additional elbow grease during the day, and if blessed with health, the poorest among us may soon bid defiance not only to high prices, scarcity of money, and prospective starvation, but in due time, to debts, duns, and difficulties in the bargain. — Live light and live cheap; it is easily done.— Rice and molasses is an admirable dish for children; salt herrings for breakfast or tea, three times a week, are enviable luxuries for grown folks, middling bacon and fried apples are both healthy and palatable, veal shin soup well made is excellent; and a fish stew, brewed according to rule is superlative.

Then for side dishes, what can match well boiled or fried potatoes, pickled beets and onions "smothered," not in "cream," but in hot water and drawn butter? A dozen or other little knick-knacks might be named, but these will suffice for the present. So much for cheap summer living; now for cheap wearing.— Brush up and repair the old shoes and stockings; pull the faded waistcoat and pantaloons ont of the closet and try them on again; they don't look so well as new to be sure, but they fit loosely and pleasantly, besides they are paid for. Get last year's winter coat from the garret, have the elbows patched, the missing button replaced, the dust brushed off, the grease spots taken out, and slip it on; then have the old hat brushed and ironed up, and look in the glass at yourself, reader, if you have heeded and followed our counsel and see how you like your personal appearance! The patches on the elbows are objectionable; true, they are not very slightly, but which is the best, a *patch* on the elbow of your coat by a tailor, or a *tap* on your shoulder by a sheriff's officer?— *Petersburg Constellation.*

(From an English Paper.)

On Horse Food.— People generally imagine, when they hear the quality of oats mentioned, that their only desirable properties consists in the brightness of color, purity of scent, and freedom from all appearances of having been damp or heated; but they rarely advert to the fact, that, when these objects have been attained, their main value yet rests in their weight; and a material difference may be found in samples, which, to the hand and eye of one who is not a good judge of the article, may appear to be of nearly the same sort, though the bushel of the one kind may be several pounds lighter than the other. The following table will show the quantity of meal which, in ordinary seasons, is usually extracted from certain weights of grain, and on which the nourishment to be obtained from it depends:

			Weight per bushel avoirdupois.					
			lb.	*oz.*			*lb.*	*oz.*
42 lbs.	produce in	meal	25	2	—do in	husk	16	14
40 "	"	"	23	6	"	"	16	10
38 "	"	"	21	12	"	"	16	4
36 "	"	"	20	3	"	"	15	13
34 "	"	"	18	11	"	"	15	5
32 "	"	"	17	5	"	"	14	11

Thus it will be seen that the beast which is fed upon oats of the latter description, (which abound in our markets,) is the loser of about one-third of the nutriment which he would obtaiu if supplied with those of good quality.

[If oats be taken at the price of sixtyfour cents the bushel of thirtytwo pounds, giving seventeen pounds and five ounces of meal, what price should be given per bushel for oats weighing fortytwo pounds and giving twentyfive pounds two ounces of meal? The answer will almost astonish one — say nearly ninetysix cents.]

Preserving Potatoes.— Chance has led to the discovery of a method of preserving potatoes, which is both simple and attended with little or no expense. A house keeper had placed in his cellar a quantity of charcoal. Having removed it in the autumn, without removing the dust that covered the ground, he caused a large quantity of potatoes to be laid on it. Towards the spring these roots were preserved, had thrown out no shoots, and were found as fresh and well flavored as new.

The Northampton Courier celebrates a *radish* twenty-three inches in length, and ten inches in circumference, and weighing five pounds.

Subscriptions have been commenced in New York for the erection of a chain bridge over the Niagara river, near the Falls.

Extract of a Letter from Gen. Tallmadge to the American Institute, dated

"NAPLES, 5th March, 1836.

"Since I arrived in this land of fame and fable, I have not been unmindful of the culture of Silk, so justly a subject of great and growing interest of our country. I have visited several manufactories of silk. It is not the season for seeing the silk worm, but most of its progress in other rsepects I have been able to see. I have made many inquiries in hopes of obtaining useful information. Finizio is an extensive manufacturer of sewing silk; he makes about 3000 lbs. a week, which is mostly sent to the New York market. He is an intelligent man, and I found him willing to answer my inquiries; as also were several other establishments, and which mostly confirmed his statement. The sewing silks of Naples are mostly made from the silk grown in *Calabria*, where the worm is fed principally upon the *black* mulberry, and which makes the strongest and best sewing silk. Finizio stated that the worm fed on the black mulberry, made the strongest thread; *that* on the *white* mulberry, finer and better for fabrics; *that* on the Chinese mulberry, still finer and more delicate. When asked if the cocoon from the Chinese mulberry required more skilful and delicate work to wind and work it, he said it did, and immediately produced two skeins, one of which, he said, was from the black mulberry, (from a bush, perhaps, eight or ten feet in circumference,) the other from a bush about four feet. The lesser bush, he said, was less liable to break the thread in winding from the cocoon, and was used in finer silks for fabrics. The black mulberry produced a stronger thread, and would bear the largest reel, and was principally used in that business. The silk here is mostly made in the country by families in detail, and much of it reeled there, and in this condition it is brought to market. For sewing silk it is doubled as often as required, and twisted as much. This process is wholly in a *dark room*. The silk is worked wet, and for this purpose, to preserve a uniformity, the atmosphere is kept damp, the day light excluded, and the work carried on with small hand lamps. The machine was turned by men harnessed like mules. I have since been out about twenty miles to the silk factory of the king, which is worked by water power, and by which the cocoons are also reeled. I stated to Finizio, as well as at the king's factory, that the Italian silk was sold in the American markets by its weight, while the American sewing silk was sold by the skein; and that one pound of the Italian would have perhaps two hundred and fifty skeins, while one of the American silk would have about three hundred and fifty skeins. The cause of this difference of weight, or why the American sewing silk has a tendency to curl or knot, they could not explain without a sample; but said the weight of sewing silk could be diminished or very considerably augmented in the *dyeing*, and that good dyeing required the silk to be well *boiled* in *soap*, after which it was put into an acid, and was there prepared for the process of the dye, according to the color, as described. The gloss, or dressing, seems to be produced by beating or twisting on a post, which, with the manual labor put upon its finish, it is supposed, prevents its tendency to knot.

I asked if the color of the cocoon, yellow or white, gave any difference of value, or indicated a sickly worm, and the answer was, that the color was casual, and the value the same; that a selection of white or yellow cocoons from which to get eggs, would probably produce a like color; and Mr Finizio said he had some customers who had so selected and brought him *cocoons* entirely *white*; and that for white ribbons or fabrics, they commanded a greater price of from three to five per cent., though otherwise of equal value.

I have made many other inquiries and observations on this subject, but which in the limits of a letter cannot be detailed. The eggs are here in market during most of the year, and by being kept in a *grotto*, or cold, damp place, the worm can be produced as required. The sirocco, or hot south wind, is here the greatest enemy of the silk worm, and sometimes suddenly destroys so many of the worms as to require the reproduction of another class, from eggs in reserve. They should be sheltered from this wind, and ventilation should be given them above or by back windows. I think we have sometimes a like south, or south-west wind, which should be guarded against, and which our gardeners call a *red wind*, from a rust produced by it on peach, and apricot trees, which curls up and burns the young leaves, and often kills the trees, and is said to effect the mulberry trees in like manner'

We do not entirely despair of having occasionally a "Johnny Cake," after the old corn is all consumed. A gentleman from Westmoreland informs us that he thinks he can safely calculate on *fortyfive* bushels to the acre from his corn fields, but considers it an exception of that of most of his neighboring farmers. While his fields remain uninjured from the frosts, others near are nearly destroyed. His lies upon a very elevated part of the town.—*Silk Grower.*

Three thousand one hundred and eleven squirrels of all kinds, grey, black, red and striped, were brought in by the two sides at a great squirrel hunt in Swanton, (Vt.) a few days since.

ESSEX AGRICULTURAL SOCIETY.

The Salem Gazette gives the following sketch of the remarks of Gov. Everett at the Essex Cattle Show.

After the report of the Committee of Arrangements had been read, Governor Everett rose and made his acknowledgments to the Committee for the manner in which they had alluded to the circumstance of his being present. He expressed his gratification at the exhibition of the day; and his confidence that the bounty of the State was beneficially applied by the Essex Agricultural Society. He stated that the wish had been expressed that he should address the audience. He felt that in complying with the request, he stepped beyond the line of usage on such occasions, but he trusted the responsibility of his doing so would be considered as resting with the Committee, by whom the wish had been expressed.

The Governor added, that he felt additional embarrassment in following the orator, who in his very able and interesting discourse, had anticipated many of the general remarks appropriate to such an occasion. His only effort could now be, to subjoin a few observations, so simple as to present themselves without research, and he hoped important enough to bear a repetition, should it happen, as was very probable, that they had been already made by the orator of the day.

After some remarks on the nature and objects of cattle-shows, and their beneficial influence on the state of the husbandry of this part of the country, Governor Everett proceeded substantially as follows:

The benefit which has accrued to our farmers from these exhibitions, cannot be estimated in dollars and cents, or measured by the figures employed to state an increase of agricultural products. A few more tons of hay from your meadows; a few more bushels of corn or potatoes from your tilled lands; a better stock of animals for the dairy, the fold, or the pen, would add something, it is true, to the public and private wealth of the community; but if nothing farther came of it, it would be a matter, in which neither the patriot nor the Christian could take a deep interest.

But when we consider, that the class of husbandmen is numerically the largest in the community; and that on their condition it has been found, in the experience of the whole world, that the social, political, and moral characters of countries mainly depends, it follows as self-evident, that whatever improves the situation of the farmer, feeds the life-springs of the national character. In proportion as our husbandmen prosper, they not only enjoy themselves a larger portion of the blessings of life; but society is kept in a healthy state, and they are enabled to make ampler provisions for the education and establishment of their children, and thus leave behind them a posterity competent not only to preserve and assert, but to augment their heritage.

It will accordingly be found, that the great differences in the political condition of different countries coincide directly with the different tenures on which the land is held and cultivated. It is not that in one country the Government is administered by an elective President; is another by a limited monarch; in another by an absolute despot. These things are not unimportant; because forms have a tendency to draw the substance after them. But a far more important question, in deciding the political condition of different countries is, *how is the land held?* The orator has told us what is the case in many parts of Europe; but there are countries, where the case is still worse. There are countries, where the land,— the whole of it,— is claimed to be the property of an absolute despot, rather a chief of brigands than a sovereign,— who once or twice a year sends out his armed hordes to scour the territory; to sweep together, without the shadow of law or pretence of right, whatever they can lay their hands on; leaving the wretched peasant little else than what he actually grasps with his teeth. Such is the system introduced into some parts of Hindostan by their Mahometan conquerors, and it has had the effect of breaking down the civilization of countries once refined, learned, wealthy, and prosperous, into a condition very little better than that of the North American savage. Contrast this with the system on which our lands are held and occupied, in pursuance of which, as a general rule, it is divided into small farms, the property of those who till them, who have every inducement and facility to better their condition, and who feel themselves on an equality with their fellow citizens, in every other pursuit. It is plain, that over such a population, no government could exist, but one like that beneath which we live, in which the people are the direct source of power. Where this is the case, it is equally plain, that whatever improves and raises the condition of husbandmen, tends directly to sustain and fortify the social fabric.

A very celebrated ancient poet exclaimed, "Oh, too happy farmers, did you but know your blessings." If this could be said of the formers of Italy, at the close of the civil wars,— subjects of an absolute prince, and a part of them only the owners of the land they tilled, it may well be repeated of the husbandmen of New England, the proprietors of a soil which furnishes a competence of all the good things of life; and the possessor of an amount of blessings never surpassed, if ever equalled. Not among the least of these privileges, is the rich birthright of patriotic recollections which has come down to us from our fathers; and of

which no portion of our country has more to boast, than the ancient county of Essex. It is no mere compliment, sir ;— the county of Essex is a distinguished part of the State. It would be easy, within the limits of this single county, to find, in the history of other times, bright examples of all the traits of character and conduct, which promote the prosperity and honor of nations in peace and in war. From the early contests with the Indians and French,— from the time when the "Flower of Essex" fell at "Bloody Brook,"— down to the close of the revolution, the fathers and forefathers of those I have the honor to address, contributed a full share of the counsel and treasure, the valor and blood by which the cause of the country was directed, sustained, and carried through triumphant.

Need I go beyond the limits of the town of Danvers? Is is not enough to recall the time, not beyond the memory I am sure of some whom I see before me, when a regiment of royal troops was here encamped, a sort of prætorian band to guard the residence of the Royal Governor? Need I do more than remind you of the morning of the 19th of April, 1775, when your sires, at the sound of the bell of yonder church, hastened together, a portion of them under the command of your venerable fellow-citizen near me, (General Gideon Foster,) and rushed rather than marched to the field of danger,— sixteen miles in four hours,— flying into the jaws of death, as rapidly as fear commonly lends men wings to fly from it; and contributing,— this single town,— this one little town,— oh, prodigality of noble blood,— one sixth of the entire loss of that eventful day. Need I, my friends, for the most touching recollections, go beyond the walls of yonder ancient church, consecrated, as it was, by the strange spectacle, (at the memory of which your tears were called forth afresh, on last year's return of the great anniversary,) — the sight of four of your brave sons wrapped in their bloody shrouds,— the honorable wounds which they had received in their country's cause still freshly flowing? Could I before this audience on such a theme, be wholly mute, would not the grey hairs of the veteran leader of that heroic band, who is now before me, (General Foster) rebuke my silence, and put a tongue in every echo of this building, which would cry out and shame me!

Yes, fellow citizens, if anything could make your native land your homes, your firesides more dear to you, it must be these recollections of the precious blood by which they were redeemed. If anything was wanting to inspire you with a passionate attachment to the blessings you enjoy, it would be the thought of the inestimable price, at which they were purchased.

Nor let us forget, if we have a patriotic ancestry to be proud of,— and if we have privileges to enjoy,— we have also incumbent duties to perform. The great principles of republican liberty are exposed to danger in peace as well as in war. Prosperity not less than trial may sap the foundation of the social fabric; and there is at all times less danger from a foreign foe, than from party passion, individual selfishness, and general apathy.

It will not, of course, be expected of me to enlarge upon the duties which devolve upon our husbandmen with a view to guard against these dangers and perpetuate our institutions in their purity. I can but glance at the topic. But I may sun's rays and the dews of heaven,— shoot upward and expand,— array itself in glories beyond the royal vesture of Solomon,— extract from the same common earth and air a thousand varieties of the green of the leaf,— the rainbow hues of the petals, the juicy or the solid substances of the fruit which is to form the food of man and his dependent animals —I say the intelligent husbandman who beholds this, seems to step behind the veil, which conceals the mysteries of creative power, and sit down, (if I dare so to speak) in the laboratory of Omnipotence.

Connected with the cultivation of the religious principle, and the natural fruit of it, we look to our husbandmen for a high moral sense. The say, that the first and most important duty of the husbandman is to endeavor to preserve, and if it may be to strengthen, the broad foundation laid by our fathers, in a deep religious principle. Surely there is no class of the community, whose daily pursuits ought to furnish greater nourishment to the sense of religious things. The reflecting mind it is true, beholds traces of a higher wisdom and goodness in every step of every walk of life; but the husbandman, who drops a seemingly lifeless seed into the cold damp earth,— there in great part to decay,— who sees the vital germ in a few days pierce the clod,— rise into the air,— drink the worst feature in the degradation of many foreign countries, is the moral condition of those who till the soil, showing itself in the extreme of intemperance, and the kindred vices. No man can fully understand this, who has not witnessed it. In the general moral character of our population, we are warranted in saying that it might serve as an example to the world. I do not think that out of New England, (and I repeat only a remark, which, I have heard several times from persons coming from other parts of the country,) you could assemble a concourse giving so much proof of sobriety, thrift, and industry, as is brought together in this town to-day, and might be assembled, on a similar occasion, in any town in Massachusetts. We look to our husbandmen, by precept and example, to sustain, and if possible elevate, this

sound state of morals in the community. — Lastly, that I may say a single word on a subject, on which the orator has preceded me — it is a great and just boast of the pilgrims and their descendants, that they made early and ample provision for education. Farmers of Essex, hold fast to that boast. I had rather for the appearance, if I must choose between them, see the country dotted all over, at its cross-roads, with its plain little village school-houses, than have the high places of a few large towns crowned with the most splendid fabrics of Grecian and Roman art. I had rather for the strength and defence of the country,— if I must choose between them,— see the roads that lead to those school-houses thronged with the children of both sexes, saluting the traveller as he passes, in the good old New England way, with their little courtesy or nod, than gaze upon regiments of mercenary troops parading upon the ramparts of impregnable fortresses. Aye, for the honor of the thing, I had rather have it said of me, that I was, by choice, the humblest citizen of the state, making the best provision for the education of all its children, and that I had the heart to appreciate this blessing, than sit on a throne of ivory and gold, the monarch of an empire on which the sun never sets. Husbandmen, sow the seed of instruction in your sons' and daughters' minds. It will grow up and bear fruit, through the driving storm scatter the blossoms of spring, or untimely frost overtake the hopes of autumn. Plant the germ of truth in the infant understandings of your children; save, stint, spare, scrape,— do anything but steal,— in order to nourish that growth;— and it is little,— nothing to say, that it will flourish when your grave-stones, crumbled into dust, shall mingle with the dust they covered;— it will flourish, when that overarching heaven shall pass away like a scroll, and the eternal sun, which lightens it, shall set in blood!

GLEANINGS IN HUSBANDRY, USEFUL ARTS. &c.

Fattening Swine.—"A farmer of our acquaintance, who is celebrated for the weight of his hogs and the excellence of his pork, is in the habit of mixing oats with his corn before grinding in the preparation of about one fourth, and thinks that if he had not the oats of his own, he should be a gainer in exchanging corn, bushel for bushel, for oats, rather than not have them to mix with his swine feed. He thinks they eat the mixture better than clear corn meal, are less liable to a surfeit, and of course will fatten much faster with the oats than without them. * * *

"The fattening of hogs on apples may be considered as one of the successful innovations of the age, it being certain that this fruit possesses a value for that purpose which but a few years since was wholly unknown. The success of this experiment has given a new value to orchards, and will probably check their distruction, which in some sections of the country had already commenced to a considerable extent. The various reports from gentlemen of intelligence of the practical results of apple feeding are most gratifying, and we have no doubt the system will be fully approved wherever fairly tested. Where convenient let the hogs lie in the orchard from the time the fruit begins to fall, till it is time to gather apples for winter or cider, and they will in most cases be found respectable pork. When it is necessary to put them in the pen, boiled apples, mixed with a small quantity of corn, oats, peas or buck wheat meal, will fill them up rapidly, make them lard well, and fill the farmers' barrels with sweet pork, of the first quality. If any, however, are doubtful, they can easily finish off their apple fed pork, as is generally done with potato fed, with corn or peas, and with similar results."— "G." *in Genessee Farmer.*

Seed Wheat.—To obtain good seed wheat, take the bundles and shake or slightly beat them over a box, and the earliest and plumpest kernels will fall out, which will be the best for seed. This method will tend to improve wheat, and is attended with very little trouble.—*Lynn Star.*

Hops.— By accounts received from the Hop Districts in England, it appears the appearance of the crop had improved beyond expectation. It is believed that a larger crop will be gathered than has been known for several years. The quality good.

Silk Cocoons have been left at our office from the House of Industry, at South Boston. They are from eggs of this year, a second crop. The worms came out August 26th, were kept in an even temperature of about 70 deg., and spun in thirty days.

Skinless Oats.— We are indebted to Mr Holmes, of Dixmont, Me. for a small quantity of Skinless Oats for distribution. We shall take pleasure in dealing them out to all applicants as long as they last.

Another Strike — The bakers in Boston have resolved no longer to bake beans for the Sunday dinners of the neighbors at three cents the pot — they have determined on having four-pence-half penny.

A man has been sentenced at the Worcester Court of Common Pleas, to nine months in the House of Correction for cruelly beating a yoke of oxen.

The President of the United States arrived at Washington on the 1st inst., from Tennessee. It is rumored that he intends to rescind the Treasury order, requiring specie payments for public lands.